United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,382	01/20/2006	Robin Mihekun Miller	60,469-253;OT-5210 LAB	5634
7590 08/06/2007 Kerrie A Laba		EXAMINER		
Carlson Gaskey & Olds			PICO, ERIC E	
Suite 350 400 West Mapl	e Road		ART UNIT	PAPER NUMBER
	Birmingham, MI 48009		3654	
			MAIL DATE	DELIVERY MODE
			MAIL DATE	DELIVERY MODE
			08/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/565,382	MILLER ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Eric Pico	3654				
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet v	vith the correspondence address				
• •	IVIC CET TO EVOIDE A	AONTHICK OF THIRTY (20) DAVIC				
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MC ute, cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18	<i>May</i> 2007.					
2a)⊠ This action is FINAL . 2b)☐ Th	This action is FINAL . 2b) This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims	10.					
4) ⊠ Claim(s) <u>1,2 and 4-24</u> is/are pending in the a 4a) Of the above claim(s) <u>7 and 13</u> is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1,2,4,6,8-12,14,17,18 and 20-24</u> is/37) □ Claim(s) <u>5,15,16,19 and 25</u> is/are objected to 8) □ Claim(s) are subject to restriction and	ndrawn from consideration are rejected.	2/07				
Application Papers						
9)☐ The specification is objected to by the Examir	ner.					
10) \boxtimes The drawing(s) filed on <u>20 January 2006</u> is/are: a) \square accepted or b) \boxtimes objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the l						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the prapplication from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in iority documents have bee eau (PCT Rule 17.2(a))	Application No n received in this National Stage				
*.						
Attachment(s)						
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 		Summary (PTO-413) o(s)/Mail Date				
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		Informal Patent Application				

Application/Control Number: 10/565,382 Page 2

Art Unit: 3654

DETAILED ACTION

Drawings

1. The drawings are objected to because reference character 40 does not refer to a

landing sill structure but landing doors 36a and 36b in Figures 5-7. Corrected drawing

sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if

only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the

appropriate figure must be removed from the replacement sheet, and where necessary,

the remaining figures must be renumbered and appropriate changes made to the brief

description of the several views of the drawings for consistency. Additional replacement

sheets may be necessary to show the renumbering of the remaining figures. Each

drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

Application/Control Number: 10/565,382 Page 3

Art Unit: 3654

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim(s) 1, 4, 6, and 10 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of West U.S. Patent No. 4915568.
- 4. **Regarding claim 1**, Kato et al. discloses an elevator assembly comprising an elevator door 2 mounted for movement relative to a car frame 1; and a sill 14 supported by the car frame 1 wherein the sill 14 moves from a retracted position to an extended position when the elevator door 2 is initially aligned with a landing door.
- 5. Kato et al. is silent concerning a locking mechanism for selectively locking the sill to the landing structure.
- 6. West teaches a locking mechanism for selectively locking a dock leveler 13 to a landing structure, broadly interpreted as the rear of a truck.
- 7. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.
- 8. **Regarding claim 4 and 6**, Kato et al. is silent concerning the locking mechanism comprises an actuator, an arm having a hook portion, and a pin mounted to the landing structure wherein the actuator actuates the hook portion to selectively engage the pin to

Page 4

secure the sill to the landing structure, and wherein the actuator comprises an electric motor.

- 9. West teaches a locking mechanism comprises an actuator, referred to as drive mechanism and electric motor 17, an arm having a hook portion, referred to as hook shaped restraining member 36, and a pin, broadly interpreted as an ICC bar, mounted to the landing structure wherein the actuator 17 actuates the hook portion 36 to selectively engage the pin ICC to secure the dock leveler 13 to the landing structure, and wherein the actuator comprises an electric motor 17.
- 10. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.
- 11. **Regarding claim 10**, Kato et al. discloses the sill 14 comprises a generally flat plate presenting continuous unbroken surface that extends from the car frame 1 to a landing structure 4.
- 12. Claims 2, 11, 12, 14, 17, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of West U.S. Patent No. 4915568 as applied to claim 1 above, and further in view of Kaneko JP Publication No. 02-163283.
- 13. **Regarding claim 2**, Kato et al. discloses the sill 14 extends outwardly from underneath the elevator door 2 along a generally linear path.
- 14. Kato et al. is silent concerning the sill extends to engage a landing structure.

Art Unit: 3654

15. Kaneko teaches a sill 3 that extends outwardly to engage a landing structure 2.

Page 5

- 16. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. extend to engage a landing structure as taught by Kaneko to negate difference in level between a cage sill and a hall sill so as not to create an obstruction in the passage.
- 17. **Regarding claim 11**, Kato et al. discloses the sill extends outwardly from underneath a car floor and is movable along a linear path towards a landing structure.
- 18. Kato et al. is silent concerning the sill is movable along a rotational path to automatically adjust for misalignment between the car floor and the landing structure.
- 19. Kaneko teaches a sill 3 movable along a rotational path to automatically adjust for misalignment between a car 1 floor and a landing structure 2.
- 20. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. movable along a rotational path as taught by Kaneko to automatically adjust for misalignment between the car floor and the landing structure.
- 21. **Regarding claim 12**, Kato et al. discloses the sill 14 is pivotally mounted to a car floor and pivots away from the elevator door 2.
- 22. **Regarding claim 14**, Kato et al. discloses a method for opening an elevator door assembly comprising the steps of: aligning an elevator door 2 with a landing door; and extending a sill 14 from underneath the elevator door 2

- 23. Kato et al. is silent concerning a method for opening the elevator door assembly comprising the steps of: extending the sill to engage a landing structure; and locking the sill to the landing structure.
- 24. Kaneko teaches a method for opening the elevator door assembly comprising the steps of: extending a sill 3 to engage a landing structure 2.
- 25. West teaches a method comprising the steps of: locking a dock leveler 13 to a landing structure.
- 26. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. extend to engage a landing structure as taught by Kaneko to negate difference in level between a cage sill and a hall sill so as not to create an obstruction in the passage.
- 27. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.
- 28. **Regarding claim 17**, Kato et al. is silent concerning a method including engaging a hook supported for movement with the sill to a pin mounted to the landing structure to lock the sill to the landing structure.
- West teaches a method including engaging a hook 36 supported for movement to a pin ICC mounted to the landing structure to lock the dock leveler 13 to the landing structure.

Art Unit: 3654

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.

Page 7

- 31. **Regarding claim 20**, Kato et al. discloses retracting the sill from the landing structure in response to a request to move the elevator door to a different landing door.
- 32. Kato et al. is silent concerning unlocking the sill from the landing structure.
- 33. West teaches unlocking a dock leveler 13 from a landing structure.
- 34. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a locking mechanisms as taught by West for selectively locking the sill and landing structure disclosed by Kato et al. to facilitate the contact between the sill and the landing structure.
- 35. **Regarding claim 21**, Kato et al. discloses the sill comprises a plate presenting a continuous unbroken surface and moves along a generally linear path extending from the door to the landing door and bridging an operating gap formed between the elevator and landing doors with the plate.
- 36. Kato et al. is silent concerning the steps of moving the sill along a generally linear path extending from the elevator door to the landing door and completely bridging an operating gap formed between the elevator and landing doors with the plate.
- 37. Kaneko teaches a sill comprises a plate presenting a continuous unbroken surface and moves along a path extending from the door to the landing door and

completely bridging an operating gap formed between the elevator and landing doors with the plate.

- 38. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the steps of moving the sill along a generally linear path extending from the elevator door to the landing door because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.
- 39. **Regarding claim 22**, Kato et al. discloses the sill 14 comprises a plate mounted to a car floor and including pivoting the plate 14 away from the elevator door 2 to engage the landing structure.
- 40. Kato et al. is silent concerning the plate engaging the landing structure.
- 41. Kaneko teaches a sill 3 that extends outwardly to engage a landing structure 2.
- 42. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the sill disclosed by Kato et al. extend to engage a landing structure as taught by Kaneko to negate difference in level between a cage sill and a hall sill so as not to create an obstruction in the passage.
- 43. **Regarding claim 23**, Kato et al. is silent concerning the step of vertically adjusting the position of the sill relative to the landing structure to accommodate misalignment between a car floor and the landing structure.
- 44. Kaneko teaches a sill vertically adjustable to a position relative to the landing structure to accommodate misalignment between a car floor and the landing structure.

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of vertically adjusting the position of the sill relative to the landing structure to accommodate misalignment between a car floor and the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.

- 46. **Regarding claim 24**, Kato et al. discloses a sill moving in a linear direction toward the landing structure.
- 47. Kato et al. is silent concerning the step of simultaneously rotating the sill and moving the sill in a linear direction toward the landing structure.
- 48. Kaneko teaches a rotating sill.
- 49. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the step of simultaneously rotating the sill and moving the sill in a linear direction toward the landing structure because these steps would result from the use of the device disclosed by Kato et al. in view of Kaneko in its normal and expected fashion.
- 50. Claim(s) 8, 9, and 18 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. JP Publication No. 54-104147 in view of Kaneko JP Publication No. 02-163283 and West U.S. Patent No. 4915568 as applied to claim 4 and 15 above, and further in view of Miyamoto et al. JP Publication No. 06-032572.
- 51. **Regarding claim 8**, Kato et al. is silent concerning a track supporting the elevator door for movement between open and closed positions, the track including a first track portion and a second track portion that is non-parallel to the first track portion;

and a seal positioned between the elevator door and the car frame wherein the door applies a compressive sealing force against the seal as the door moves from the first track portion to the second track portion.

Page 10

- 52. Miyamoto et al. teaches a track, referred to as guide grooves 14, supporting an elevator door 2 for movement between open and closed position, the track 14 including a first track portion and a second track portion, referred to as curved parts 15, that is non-parallel to the first track portion; and a seal, 16-18 positioned between the elevator door 2 and the car frame wherein the door applies a compressive sealing force against the seal 16-18 as the door 2 moves from the first track portion to the second track portion 15.
- 53. It would have been obvious to one of ordinary skill in the art at the time of the invention to support the elevator door disclosed by Kato et al. with a track including a first track portion and a second track portion that is non-parallel to the first track portion; and a seal positioned between the elevator door and the car frame as taught by Miyamoto et al. to tightly close up a car so as to prevent invasion of noise.
- 54. Regarding claim 9, Kato et al. discloses the sill moves at a first extension speed.
- 55. Kato et al. is silent concerning the elevator door extends outwardly away from the car frame at a second speed slower than the first speed to release compression on the seal.
- 56. Miyamoto et al. teaches elevator doors extend outwardly away from the car frame at a speed to release compression on the seal 16-18.

- 57. It would have been obvious to one of ordinary skill in the art at the time of the invention to extend the elevator doors outwardly away from the car frame as taught by Miyamoto et al. at a speed slower than a first extension speed of the sill disclosed by Kato et al. to tightly close up a car so as to prevent invasion of noise.
- Regarding claim 18, Kato et al. is silent concerning the steps of positioning a seal between the elevator door and a car frame; supporting the elevator door on a track for movement relative to the car frame between open and closed positions; and compressing the seal between the elevator door and the car frame as the door moves from a first track portion to a second track portion that is non-parallel to the first rack portion.
- 59. Miyamoto et al. teaches the steps of positioning a seal 16-18 between the elevator door 2 and a car frame; supporting the elevator door 2 on a track 14 for movement relative to the car frame between open and closed positions; and compressing the seal 16-18 between the elevator door 2 and the car frame as the door 2 moves from a first track portion to a second track portion 15 that is non-parallel to the first rack portion.
- 60. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the steps of positioning a seal as taught by Miyamoto et al. between the elevator door and a car frame disclosed by Kato et al.; supporting the elevator door disclosed by Kato et al. on a track as taught by Miyamoto et al. for movement relative to the car frame between open and closed positions; and compressing the seal as taught by Miyamoto et al. between the elevator door and the car frame disclosed by Kato et al.

as the door moves from a first track portion to a second track portion that is non-parallel to the first rack portion to tightly close up a car so as to prevent invasion of noise.

Allowable Subject Matter

61. Claims 5, 15, 16, 19, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

- 62. Applicant's arguments filed 05/18/2007 have been fully considered but they are not persuasive.
- 63. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).
- 64. In response to applicant's argument that there is nothing in the prior art to suggest combining Kato et al. JP Publication No. 54-104147 in view of West U.S. Patent No. 4915568. The examiner recognizes that obviousness can only be

vehicle is docking with a landing structure.

Art Unit: 3654

established by combining or modifying the teachings of the prior art to produce the

Page 13

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Firstly, it should be noted that there is no requirement that an express, written suggestion to combine must appear in prior art references before a finding of obviousness. In addition to the teachings of the references themselves, the suggestion to combine references may be found in the nature of the problem to be solved or the knowledge of persons of ordinary skill in the art. Furthermore, while there must be a motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention. In this case, the suggestion to combine Kato et al. in view of West comes from the knowledge of one of persons of ordinary skill in the art to utilize a locking mechanism when a

65. In response to applicant's argument that "If one were to attempt to incorporate the West arrangement as suggested by the Examiner, the truck restraining member 19 would not allow for the elevator car to move vertically within a hoistway", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

66. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589.

The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Page 15

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP

Peter M. Cuomo
Supervisory Patent Examiner
Technology Center 3600